

## Conference Abstract

# A Content Management System and underlying models for avian taxonomic monographs

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## Abstract

Taxonomic monographs are a series of publications covering a higher taxonomic group with each monograph focusing on an individual species. They are a compendium of the current state of research and knowledge detailing many aspects of the species and are extensively used by researchers, ornithologists and conservationists to learn what is 'currently' known about a species. Birds, being one of the more easily seen and studied taxa, have a number of specialized taxonomic monographs where data from a wide variety of disciplines are combined into a single place and utilized for research and conservation management. Many of the existing avian monographs have regional or subdomain focus such as "Birds of the Western Palearctic" or "Catalan Breeding Bird Atlas 1999-2002" and monographs are sometimes focused on different user communities, ranging from those with casual interest to professional ornithologists and researchers.

The Lab of Ornithology maintains several monograph series. Merlin and All About Birds include simplified information that is of interest to the casual observer and Birds of North America and Neotropical Birds Online are monographs with complete, detailed life histories, prepared for ornithologists and active researchers. These monograph projects were originally supported using different Content Management Systems which became very difficult to maintain, difficult to keep content current and provided no capacity for organizing and sharing of content across monograph projects. Bird taxonomies change annually and the previous systems had no capacity to intelligently manage taxonomic changes. To solve these issues, we created a new Content Management System with

Taxonomic Concepts at its core. Reviewing a number of existing monograph projects led us to create an underlying content structure that is very analogous to Plinian Core. The initial requirement to support multiple monograph series, some focused on the professional community and others focused on budding amateurs, presented challenges to creating a 'one size fits all' model for structuring content that includes authoritative articles covering most aspects of a species life history, traditional range maps, dynamic observation maps, relative abundance models, photos, images, video and a bibliography. In this talk I'll present in detail the Content Management System and the underlying models we have developed. Four of these five models are tied to the underlying taxonomic concept while the fifth is tied to the taxonomic names. Articles, multimedia (including traditional range maps), taxonomic description and bibliography have long existed in print monographs and having these authored and displayed via the web makes it much simpler to incorporate new information and, keep the information current and publish the information to an existing standard. The incorporation of dynamic content has only been possible with the advent of the web and standards for the underlying Taxonomic Concepts. With four monographs currently in production and several more in development, we've encountered both advantages and disadvantages in using these models for managing and serving monograph series. I will discuss these in detail and compare the models with Plinian Core to highlight both fundamental differences as well as common ground.

## **Keywords**

taxonomic monograph content management system plinian core

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